食蚜蝇科一新种(双翅目)*

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本文记述双翅目食蚜蝇科锤食蚜蝇属(Hammerschmidtia Schummel)一新种,该属在中国为首次记录。文中形态描述参见 Hull (1949)。所有模式标本保存在江苏省农业科学院植物保护研究所昆虫标本室。

锤食蚜蝇属 Hammerschmidtia Schummel 1934,中国新记录

Hammerschmidtia Schummel 1834, Isis, VII: 740. Genotype: Hammerschmidtia vittata Schummel 1834 = (Rhingia ferrginea Fallen 1817).

属征 小型或中型种类,体黑色,常具赤色或黄色斑纹;头部前面观呈三角形;雄虫两 眼接近或仅一点接触;颜面上方微凹,无中疣,下方及口侧缘显著向前下方突出。触角短,第 3 节呈宽椭圆形,触角芒具短毛。眼下方及下后头区极大。胸部,肩胛明显外露;中胸 背板常具灰黑相间的纵条,小盾片宽而窄,近矩形。中胸侧板背侧具较发达的粗鬃。腹部背板较平坦,常具淡色横带,腹缘向下卷曲。足,腿节较粗壮,后足腿节膨大。翅脉:脉序一般式,分径脉 (r_*) 具短鬃,第三纵脉 (r_{*+}) 平直,径中横脉(r-m)位于盘室 $(1M_2)$ 前缘中部之前(图4)。雄虫外生殖器:侧尾叶背端常为球状隆起,腹侧呈板状;第 9 腹板与阳茎侧叶分离不明显,阳茎具外鞘并缩于其中。

锤食蚜蝇属原为短食蚜蝇属(Brachyopa Meigen 1822)的一个亚属,现已提升为属,两者在形态上很接近。他们的主要区别是后者之种类胸部无粗鬃;后足腿节正常形态,不膨大,腿节腹面的短刺较少。锤食蚜蝇属已记载 2 种,加本文记述的新种共有 3 种,其中Hammerschmidtia ferruginea (Fall.)分布于旧北区和新北区, H. ingrica (Stackel.)分布于欧洲中部西伯利亚和远东地区,本新种为该属分布的最南记录。

脊颜锤食蚜蝇 Hammerschmidtia tropia Chu,新种(图 1-7)

♂ 头部正面观呈三角形。头顶微凹,三角区褐色,被棕黄色毛;单眼棕色。额和颜面显著向前方突出(图1);额黑褐色,密被灰白色绒毛,中央具一条纵沟,额毛黄白色。颜面向前下方斜突,下方中央具极明显的纵脊,颜面中央褐色,余黄褐色。颊窝呈新月形,深凹;颊窝与复眼之间黑褐色。眼后区上方狭小,并呈弧形向前凹陷,眼下及眼后区下方极发达,并向后鼓出;颜面、眼下方及眼后区密被灰白色绒毛及黄白色长毛。眼合生,两眼仅接触于一点;眼面光滑。触角黑褐色,仅腹面略带黄色,第一、二节短,长宽约相等,第三节长椭圆形,长约为宽的1.5—3倍;触角芒具微毛。胸部与头部同宽。肩胛裸露,被棕黄色长毛;胸背具四条黑色纵带,其中中央二条较细而直,接近;外侧二条宽,并为盾间沟所分

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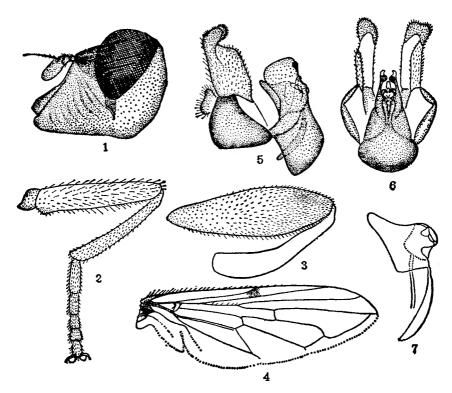


图 1-7 脊额锤食蚜蝇 Hammerschmidtia tropia Chu sp. nov. 1.头部侧面观;2.中足;3.后足腿节和胫节;4.翅脉;5.雄虫外生殖器侧面观;6.雄虫外生殖器腹面观;7.阳茎侧面观。

割;被毛棕黄色,并混杂少量黑色短毛。小盾片宽而窄,宽约为长的 3 倍,前方黑色,后方棕黄色,被黄色短毛。中胸侧板在翅基前方具一短列长鬃,几乎成束。胸侧板及腹板褐色,密被黄白色绒毛,毛黄白色;后胸腹板具微毛。腹部卵圆形,背面较平坦,侧缘下卷。第 1 背板灰白色;第 2 至 4 背板黑色,后端缘为黄色;尾节大,背面可见;腹板灰白色,毛同色。足黑褐色,被灰白色绒毛及黄白色长毛;腿节粗壮,腹面具短刺列;中足腿节基部内侧具一疣状突起(图2);后足腿节膨大,腹侧及端前方有很多黑色小刺(图3)。翅脉见(图4),翅略带黄色,痣棕色,痣横脉缺;径分脉(r,)具短鬃,径中横脉(r-m)位于盘室(1M2)前缘中部之前;伪脉不明显。平衡棒黄色略带褐。

外生殖器(图5-7) 侧尾叶(surstyli)背面与腹面不分离,背侧宽厚,高于腹面。第9腹板基部球状;阳茎侧叶近方形,端部向内弯曲,内侧中部各延伸出一钩状突起;腹缘上方黑色加厚,中央呈角状突出。阳茎鞘(ejaculatory hood)呈倒靴形,射精管内缩;阳茎内骨大刀状。

♀ 与♂相似。头顶宽度约为头宽的1/4,略凹陷,黑褐色。额两侧下方光滑,黑色具光泽。触角第三节长约为宽的 2 倍。中足腿节基部疣状突起较小;后足腿节略粗肿;各足腿节腹面短刺均较雄虫少。

体长 8-10mm; 翅长 9-10mm。

正模♂,配模♀,南京,1987. III. 25; 副模 20♂♂,5♀♀,南京, 1983. IV. 10,1987.

III,25;所有标本均由储西平采。

新种与属内 H. ferruginea (Fall.) 和 H. ingrica (Stackel.) 的主要区别是新种颜面脊起特别显著;小盾片后半部分黄色;胸侧板具一短列粗鬃,几乎成束状;中足腿节基部内侧具一疣状突起及特殊的分外生殖器形态。

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A NEW SPECIES OF SYRPHIDAE (DIPTERA)

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The Syrphid flies of the genus Hammerschmidtia Schummel, first record from China, and a new species of the genus are described in this paper. The type specimens are deposited in the insect collection of the Institute of Plant Protection, Jiangsu Academy of Agricultural Sciences.

Hammerschmidtia tropia Chu sp. nov. (figs. 1-7)

Male: Face strongly produced diagonally forward, lower face strongly tricarinate. Postgena and lower occiput greatly enlarged. Eye bare, holoptic only for one point. Antenna black, third segment 1.5—3 times as long as wide. Mesonotum black brown. Hind half scutellum yellow. Mesopleura has a row of bristles on the front base of wing. Abdomen oval, first tergite grey, 2—4 tergites black with posterior edge yellow. Leg black, femora strong with black spinules; base of mid femora with a tubercle; hind femora swollened.

Genitalia: Surstyli with dorsal and ventral lobe unseperated. Sternite 9 symmetric. Aedeagus: ejaculatory hood rectage with a finger-like notch, ejaculatory process inner hided, sustencular adopeme knife-like.

Female: Similar to the male. Vertex about 1/4 width of the head. Tubercle on the mid femora small. Hind femora moderately swollened.

Length: 8-10mm; Wing: 9-10mm.

Holotype of, Allotype Q, Nanjing, Mar. 25, 1987; paratypes: 20 of of 5 Q Q, Nanjing, Apil. 10, 1983; Mar. 25, 1987; all specimens collected by Chu Xiping.

The new species differs from the other species of the genus in following respects: Strongly tricarinated face, mesopleura with a row of black bristles, base of mid femora with a tubercule and the difference of male genitalia.